DOCUMENT RESUME

ED 149 125 CE 014 388

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TITLE	The Needs Assessment of Implementing NTIS into the VTAE System. Final Report.
INSTITUTION	Wisconsin Univ. - Stout, Menomonie. Center for Vocational, Technical and Adult Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.; Wisconsin State Board of Vocational, Technical, and Adult Education, Madison.
REPORT NO	19-017-151-226-D
PUB DATE	Jan 78
NOTE	39p.
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Administrator Attitudes; Adult Education; *Curriculum Development; Feasibility Studies; *Information Needs; Information Sources; *Information Systems; Needs Assessment; State Surveys; *Teacher Attitudes; Technical Education; *Vocational Education
IDENTIFIERS	*National Technical Information Service; *Wisconsin

ABSTRACT

A study investigated the competencies required to use the National Technical Information Service (NTIS) and the perceived need for its use for curriculum and instructional improvement in the Wisconsin Vocational, Technical, and Adult Education (VTAE) system. A representative sample (N=249) of VTAE instructors and staff was selected for the survey portion of the study. Survey instruments were developed and mailed to key administrative personnel and randomly distributed to VTAE instructors in selected technical areas. Results indicated (1) that 65% of the respondents agreed or strongly agreed that there is a need for an information search system such as NTIS, (2) that 87% were not aware of NTIS although 71% felt they would use such a system were it available, (3) that 38% disagreed or were undecided as to whether they were able to find new information pertinent to their technical area when they needed it, and (4) that 56% agreed that finding technical information was hard to do because technology is constantly changing. It was concluded that in order to facilitate use of a system such as NTIS, workshops will have to be offered for VTAE staff to develop the competencies needed in conducting an information search. Portable microfiche readers will also have to be made available to facilitate use of microfiche materials. A copy of the survey instrument is included. (JT)

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Final Report

Project No. 19-017-151-226-D

THE NEEDS ASSESSMENT OF IMPLEMENTING NTIS INTO THE VTAE SYSTEM

Leland Rust

Center for Vocational, Technical and Adult Education
University of Wisconsin-Stout
Menomonie, Wisconsin

January, 1978

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ACKNOWLEDGMENTS

Appreciation is herewith extended to the Center for Vocational, Technical and Adult Education staff at the University of Wisconsin-Stout. Their help made the many different procedures of this study much easier to complete.

My appreciation for suggestions, guidance and assistance in the preparation of this paper must be expressed to Dr. Richard Gebhart, Industrial Education Instructor, Dr. Orville Nelson, Research Specialist, Center for VTAE and Dr. Harold Halfin, Vocational Education Director. Appreciation for comments pertaining to the development of the questionnaire are expressed to Dr. Sherman Ansell and Roland Krogstad. Support of the Wisconsin Board of VTAE through a grant was essential in the completion of this research and is sincerely appreciated by the researcher.

Finally, particular appreciation is given to my wife, Sherry. Her patience and understanding was always evident and was greatly appreciated.

Leland Rust

Chapter I

SUMMARY, PROBLEM AND RATIONALE

Summary

The primary purpose of this study was to investigate the competencies required to use and the perceived need for the National Technical Information Service (NTIS) for curriculum and instructional improvement in the Wisconsin VTAE system. The information gathered in this study will help in determining if there is a need for additional information sources over and above that which are presently being used by the VTAE instructional staff.

In this study a representative sample (N=249) of VTAE instructors and staff was selected for the survey portion of the study. Two urban (Fox Valley and Waukesha) VTAE districts and two predominately rural (Southwest and Wisconsin Indianhead) VTAE districts were used in this study. Survey instruments were developed and mailed to key administrative personnel and randomly distributed to VTAE instructors in selected technical areas. Personal interviews were also conducted at the Madison Area VTAE district.

The survey indicated that 65.8 percent of the respondents surveyed agreed or strongly agreed that there is a need for an information search system such as NTIS, 26.1 percent are undecided as to a need for an information search system.

Analysis of the survey data indicated that 87.7 percent of the respondents were not aware of the NTIS system. However, 71.8 percent of the respondents indicated that they felt they would use an information search system as a source in developing classroom instruction if one were made available.

The results of this study show that 38.1 percent of the respondents disagreed or were undecided when asked if they were able to find new and relevant information pertaining to their technical area when they needed it. Fifty-six point three percent of the VTAE instructors agreed that finding technical information was hard to do because technology is constantly changing.

From the data obtained in this study, it seems that in order to facilitate use of an information system such as NTIS, workshops will have to be offered for the VTAE staff to develop the competencies needed in conducting an information search. Portable microfiche readers will also have to be made available in order to help facilitate use of the microfiche materials.

Statement of the Problem

The purpose of this study was to investigate the needs of the VTAE instructional staff based on the possibility of implementing an information search system such as NTIS into the VTAE system.

Study Objectives

The objectives developed for use in the study are as follows:

1. To identify the motivation and equipment needed by vocational educators and staff in order to utilize NTIS.
2. To determine the needs of vocational educators in keeping relevant with new research related to the field of vocational education.
3. To identify the information sources that have been used or are currently being used by vocational educators and staff.

4. To identify respondents' VTAE district and type of work.

Rationale

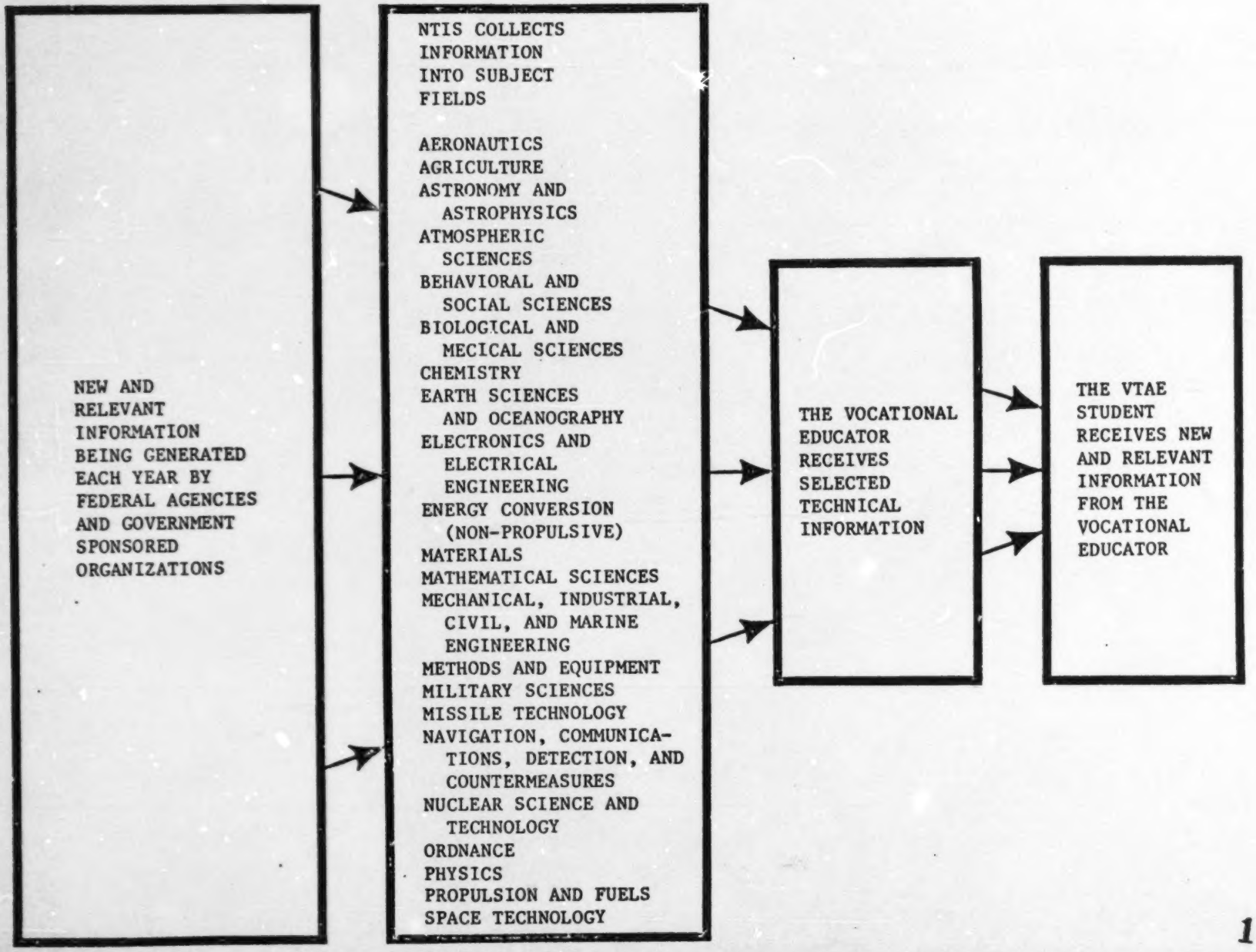
Every year there are approximately 60,000 new technical reports and publications produced by federal agencies and government sponsored organizations. Jelden (1976) indicates that NTIS collection now exceeds 730,000 titles with more than 100,000 documents in current stock. With this in mind it is easy to see why it is difficult for the vocational educator to identify with relevant research relating to problems in keeping subject matter in the classroom up to date with the continuous flow of new and relevant technical information. Figure I is an illustration of the NTIS system in helping the vocational educator use new and relevant information in the classroom.

NTIS was established to provide the capability of obtaining relevant studies through the use of specific descriptions which define the content of the needed information. The system contains a listing of all funded scientific and technical projects under contract with the government. Research done by agencies such as the military on instructional methods and curriculum development is listed through NTIS.

Thus far the NTIS system has not been as extensively used as anticipated. This study helps in determining the needs of vocational educators pertaining to the possible implementation of NTIS into the VTAE system.

Figure 1

NTIS HELPING THE VOCATIONAL EDUCATOR USE
NEW AND RELEVANT INFORMATION IN THE CLASSROOM



DEFINITION OF TERMS

Throughout this study, special terms will be found. They will be defined in the following manner:

Competency: Satisfactory performance of one or more tasks by the vocational educator. Satisfactory performance depends upon psychomotor, affective and cognitive achievement which collectively are measured when the vocational educator performs a specified job related task(s) under certain specified conditions to a specified level of performance.

Descriptors: "Any key word, group of key words, defined concept, subject heading, or other descriptive label assigned to an item in the process of listing its characteristics is a descriptor."

ERIC: The acronym represents Educational Resources Information Center. ERIC acquires research and other literature in education. All government sponsored research in education is supposed to be entered in this system. Other research and documents in education can be submitted by the authors for screening and approval. Several clearinghouses have established in special areas of emphasis such as administration, career and vocational education and measurement. Most university libraries and many of the VTAE districts in Wisconsin have a complete set of the ERIC fiche. Computer search and retrieval are available through the Wisconsin RCU.

GRA: The Government Reports Announcements (GRA) is published twice monthly by NTIS to provide public access to new report literature as it becomes available. The listings include title, author, price, and in most cases, concise abstracts.

GRI: The Government Reports Index (GRI) is published concurrently with the GRA and indexes the corresponding issue by Corporate Author, Subject, Personal Author, Contract Number, and Assession/Report Number.

Information Search: A means of providing new sources of information through the use of such systems as NTIS (National Technical Information Service) and ERIC (Educational Resources Information Center).

NTIS: The National Technical Information Service (NTIS) is the central source for the public sale of Government-sponsored research and development reports, and other government analyses prepared by Federal agencies, their contractors or grantees. The NTIS collection now exceeds 730,000 titles, to which some 60,000 new reports are added annually. These reports contain new information vital to fields like the environment, energy, electronics, the behavioral sciences, biological and medical sciences, and many more.

NTIS Handbook: This manual gives step by step instructions for accessing GRA and GRI. The manual uses photographs and photocopied information to better acquaint the user with the format and content found in using NTIS.

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[1]Meethan, A.R., ed. Enclyclopedia of Linguistics, Information, and Control. Oxford, Pergamon Press, 1969.

Vocational Education: That education which is designed to prepare individuals for initial entrance into and advancement within occupations or groups of related occupations requiring a high portion of manipulative skills.

Vocational, Technical and Adult Education District (VTAE): Area post-secondary vocational, technical and adult school districts legislated and designed to provide a wide-range of occupational training programs and services.

Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE): A state educational agency designed to provide administrative and consultative services to the sixteen state post-secondary vocational, technical and adult districts in Wisconsin.

Chapter II

METHODS AND PROCEDURES

Population

The data for this study were collected from a random sample of vocational educators in the Wisconsin VTAE system during the 1975-76 school year. Two urban (Fox Valley and Waukesha) VTAE districts and two predominately rural (Southwest and Wisconsin Indianhead) VTAE districts were used in this study (Appendix A). This sample included classroom teachers and first line supervisors. Key administrative personnel (Appendix B) in each district surveyed were asked to distribute a total of 249 questionnaires in the subject areas specified by individual cover letters sent them (Appendix C). These cover letters were returned to the researcher with a count of the total random distribution of the questionnaires made by the key personnel (See Table 1). During the period of time that the data was being collected, interviews were conducted for the purposes of cross referencing with that of the survey results. Five interviews were conducted at the Madison and Janesville VTAE campuses consisting of resource center personnel and program department heads. The information received from the interviews closely paralleled that data received from the survey instrument.

Developing the Questionnaire

A three page survey instrument was developed for collection of data from 249 VTAE instructors and staff working in the Wisconsin VTAE system (Appendix D).

Table 1

Table of Random Survey Distribution by School and Area of Discipline

School	Area of Discipline								
	Agriculture	Business Education	Distributive Education	General Education	Health Occupations	Home Economics	Librarian	Research and Development	Trade and Industry
Fox Valley	0	10	0	10	10	10	1	1	10
Southwest	10	10	0	10	0	6	1	1	10
Waukesha	0	10	0	10	10	1	1	2	10
Wisconsin Indianhead .	5	24	2	23	8	5	4	0	34
TOTAL DISTRIBUTION IN AREAS	15	54	2	53	28	22	7	4	64

Assistance was given when consulting with advisory personnel at the University of Wisconsin-Stout: Orville Nelson, Research Specialist, Center for Vocational, Technical and Adult Education (CVTAE) and Harold Halfin, Co-Director, Center for Vocational, Technical and Adult Education.

Specific objectives based on a review of literature were developed for the survey instrument before formulation of the questions.

A pilot run of both the ERIC/NTIS computer search systems was performed. The researchers selected various topics of study and ran computer searches on each of these topics. This was done in order to help the researcher further develop objectives for the study and help in determining the competencies needed of an instructor in using an information search system. A modified task analysis approach was used to isolate these competencies. From this material and the advice of the advisory personnel, a rough draft of the survey instrument was developed. This draft was then sent to Sherman Ansell and Roland Krogstad of the State Board of VTAE for their review. Suggestions made by the state staff and advisory personnel were taken into consideration and implemented in the development of the final draft of the survey instrument.

Table 2 identifies the questions used in the survey instrument which enabled the researcher to meet the study objectives.

Table 2

Table of Study Objectives and Corresponding Survey Questions

Study Objectives	Number of Related Survey Questions
1. To identify the motivation and equipment needed by vocational educators and staff in order to utilize NTIS	9, 12, 16, 17, 19, 20, 21
2. To determine the needs of vocational educators in keeping relevant with new research related to the field of vocational education.	6, 7, 8, 10, 13, 14, 15, 18
3. To identify the information sources that have been used or are currently being used by vocational educators and staff.	4, 5, 11
4. To identify respondents' VTAE district and type of work	1, 2, 3

ACTIVITIES AND TIME SCHEDULE

Activity	Date
1. Complete review of literature.	January, 1976
2. Select VTAE district to participate in the study.	January, 1976
3. Identify committee members and select random sample of survey population.	January, 1976
4. Pilot run of ERIC/NTIS computer search.	January, 1976
5. Develop first draft copy of data collection forms.	January, 1976
6. Pilot test data collection forms and revise.	February, 1976
7. Print final copy of data collection forms.	February, 1976
8. Mail survey forms.	February, 1976
9. Arrange for interview with selected vocational educators.	February, 1976
10. Conduct interviews.	March, 1976
11. Follow up on interviews.	March, 1976
12. Follow up on survey forms.	April, 1976
13. Analyze data	April, 1976
14. Write rough draft of chapters I & II.	June, 1976
15. Write rough draft of chapter III.	August, 1976
16. Review of chapters I, II & III by Orville Nelson.	June, 1977
17. Two meetings with Orville Nelson concerning revision of paper.	August, 1977
18. Write rough draft of chapter IV.	November, 1977
19. Completion of final report.	January, 1978

Chapter III

FINDINGS AND ANALYSIS

Introduction

The survey instrument (Appendix D) used in this study was distributed to 249 VTAE instructors and staff. Two urban (Fox Valley and Waukesha) and two predominately rural (Southwest and Wisconsin Indianhead) VTAE districts (Appendix A) were selected for this study. One hundred fifty-five participants responded to the survey instrument.

The twenty-one questions from the survey were grouped into four specific clusters of items based on the study objectives.

1. To identify the motivation and equipment needed by vocational educators and staff in order to utilize NTIS.
2. To determine the needs of vocational educators in keeping relevant with new research related to the field of vocational education.
3. To identify the information sources that have been used or are currently being used by vocational educators and staff.
4. To identify respondents' VTAE district and type of work.

Study Objective One

To identify the motivation and equipment needed by vocational educators and staff in order to utilize NTIS.

Study objective one can be further broken down into two areas: motivation and equipment. Survey questions 9, 12, 16, 17 and 19 dealt with the motivational aspects while survey questions 20 and 21 pertained to need for equipment. When asked if an information search system such as NTIS would be used

if available, 70% of the respondents agreed or strongly agreed while only 26% of the respondents were undecided (item 16). Eighty percent of the respondents also felt that there is an additional need for content matter other than what is found in textbooks (item 17). Table 3 presents the mean responses and standard deviation for each of these items.

When asked if there were sufficient microfiche readers and facilities, 70% of the respondents were either undecided or disagreed (item 20). Twenty-nine percent of the respondents felt that more portable microfiche readers would increase their use of microfiche materials (item 21). In general, the respondents thought that additional portable microfiche readers would enhance the use of microfiche ($\bar{x} = 3.53$). Data received from the interviews closely paralleled the responses received from the survey instrument for objective one.

There is adequate motivation to use NTIS to modify and improve instruction. Student utilization could be better realized if more portable microfiche readers were made available.

Study Objective Two

To determine the needs of vocational educators in keeping relevant with new research related to the field of vocational education.

Sixty percent of the respondents periodically or frequently look for information from alternative sources of materials for their work. It was found that over one-half of the respondents frequently or very often looked for information on basic processes, competencies, performance tasks, theoretical background information, curriculum materials, and demonstration projects. (See Table 4). Approximately 40% of the respondents indicated that they frequently looked for information concerning evaluation and

Table 3

Potential Applications of NTIS

	Survey Question	Mean	Standard Deviation
9.	After identifying a problem or topic, I am able to readily establish key words or descriptors which best describe the problem or topic.	3.53#	0.78
12.	After identifying a problem or topic, I understand how to conduct an information search on that topic.	3.51	1.02
16.	If an information search system was introduced in the resource center, I would want to use the system for a source in developing classroom instruction or for assisting me in my job responsibilities.	3.92	0.82
17.	There seems to be little need for additional content matter in my area other than what is found in textbooks.	2.03	1.03
19.	The NTIS system could provide assistance to students in developing projects, papers, etc.	3.48	0.78
20.	There are adequate microfiche readers and reproduction facilities in our resource center.	2.82	1.13
21.	If microfiche materials were available, I would probably use them more if portable microfiche readers were available for my use.	3.53	0.83

#Key: 5 = Strongly Agree
4 = Agree
3 = Undecided
2 = Disagree
1 = Strongly Disagree

N = 155

Table 4

Frequency of Use for Information Sources

Survey Question	Mean	Standard Deviation
6. How often do you look for the following types of information when preparing materials for your work?		
(1) Alternate sources of materials and information for my work.	3.80#	0.92
(2) Basic processes, competencies and performance tasks in my field.	3.52	0.96
(3) Curriculum materials and demonstration projects.	3.64	1.01
(4) Evaluation and assessment of students and programs.	3.39	1.02
(5) Labor market information.	3.18	1.17
(6) Recent innovations and ideas in my field.	4.08	0.82
(7) Theoretical background material in my field.	3.37	0.99

#Key: 5 = Very Often
4 = Frequently
3 = Periodically
2 = Seldom
1 = Never

N = 155

assessment of students and programs and information pertaining to the labor market. It should be noted that information on recent innovations and ideas in their field was the most sought after type of information. Seventy-five percent of the respondents said that they frequently or very often looked for this type of information.

It should also be noted that 94% of the respondents felt they were interested in finding new information pertaining to their field of instruction, while 62% of the respondents said they were satisfied with the information and material found in their schools' resource center. (See Table 5). VTAE staff responses to the survey indicated that their field was constantly changing (item 18) and there was a need to have access to research findings (item 10). Sixty-three percent of the respondents indicated that thye would like to have access to government sponsored research projects such as NTIS. Data received from the interviews closely paralleled to the responses received from the survey instrument in objective two. There appears to be a definite need for vocational educators to have access to new and relevant research information. NTIS offers this type of information, especially in the area of new research.

Study Objective Three

To identify the information sources that have been used or are currently being used by vocational educators and staff.

Over one-half of the respondents indicated that government publications, newspapers, research materials, trade journals, and workbook publications were sources of information that they used for their work. It should be

Table 5

Informational Needs of VTAE Instructors

Survey Question	Mean	Standard Deviation
7. Most of the time I am able to find new and relevant information and material pertaining to my area in my school's resource center.	3.47#	1.02
8. I would like to have access to the reports of government sponsored research projects.	3.70	0.92
10. My area of work seldom requires me to obtain research material.	2.38	1.20
13. I am interested in finding new information in my field to be used in classroom instruction or for my job responsibilities.	4.40	0.67
14. I feel there is a need for an information search system in our resource center.	3.83	0.89
15. I feel that relevant and new information in my area would assist me in classroom instruction or for my job responsibilities.	4.23	0.67
18. I find technical information in my area is constantly changing and as a result makes new and relevant information hard to find.	3.46	1.05

#Key: 5 = Strongly Agree
4 = Agree
3 = Undecided
2 = Disagree
1 = Strongly Disagree

N = 155

noted that the two most used sources of information are books and periodicals. (See Table 6). Governmental publications and research reports were used by 51% and 54% respectively of the respondents.

The respondents were also asked their present competency level pertaining to various retrieval activities. Sixty-four percent responded that they could use the Reader's Guide to Periodical Literature without any assistance. (See Table 7). Of the other information sources polled, very few indicated that they could perform ERIC or NTIS type searches. Data received from the interviews closely paralled the responses received from the survey instruments for objective three.

Study Objective Four

To identify respondents VTAE district and type of work.

Four VTAE districts participated in this study: Fox Valley, Southwestern Wisconsin, Wisconsin Indianhead and Waukesha. Wisconsin Indianhead and Waukesha. Wisconsin Indianhead made up 49% of the returns but please keep in mind that there are also four separate schools in the Wisconsin Indianhead District.

The respondents were randomly selected from a cross section of occupational areas. Seventy percent of the respondents were teachers. Other respondents were administrative staff and library personnel. The three occupational areas that provided the greatest number of returns were: Trade and Industry, General Education and Business and Office Occupations (See Table 8). Responses were received from staff in all of the vocational fields. Data received from the interviews at the Madison and Janesville VTAE campuses closely paralleled the responses received from the data obtained from the survey instrument.

Table 6

Information Sources Used by Wisconsin VTAE Staff

Survey Question	Percent	Number
4. Please check the type of information sources that you use for your work.		
(1) Books	95	147
(2) Government Publications	51	79
(3) Manufacturer's Data Sheets	37	57
(4) Newspapers	54	83
(5) Periodicals	75	117
(6) Research Materials	54	83
(7) Trade Journals	65	101
(8) Workbook Publications	52	80

	Mean	Standard Deviation
11. Most of the information I use in my work comes from textbooks.	3.01#	1.25

#Key: 5 = Strongly Agree
4 = Agree
3 = Undecided
2 = Disagree
1 = Strongly Disagree

Table 7

Competency in Using Retrieval Systems

Survey Question	Mean	Standard Deviation
5. Please circle your present competency level of each retrieval activity.		
(1) Reader's Guide to Periodical Literature.	4.14#	1.26
(2) ERIC Computer Search	2.48	1.03
(3) ERIC Manual Search	2.89	1.26
(4) NTIS Computer Search	1.30	0.61
(5) NTIS Manual Search	1.36	0.75

#Key: 5 = Can do with skill
4 = Can do with guide or manual
3 = Can do with assistance
2 = Aware of
1 = Strongly Disagree

Table 8

Identification of Respondents' VTAE District and Type of Work

Survey Question	Percent	Number
1. In what vocational district are you presently employed?		
(1) Fox Valley	19	29
(2) Southwest Wisconsin	19	29
(3) Wisconsin Indianhead	49	76
(4) Waukesha	14	21
2. In what area do you do the greater part of your work?		
(1) Administration	4	6
(2) Agriculture	5	8
(3) Business & Office Occupations	15	24
(4) Distributive Education	7	12
(5) General Education	20	33
(6) Health Occupations	10	17
(7) Home Economics	4	7
(8) Research	1	2
(9) Trade & Industry	22	37
3. What is your present position?		
(1) Assistant Director	1	2
(2) Coordinator	8	12
(3) Department Chairperson	4	7
(4) Teacher	74	118
(5) Other: Librarians, Researchers, etc.	13	21

Chapter IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the information and data collected, the following conclusions may be stated.

1. There appears to be adequate motivation to use NTIS in modifying and improving instruction in the VTAE system. Seventy percent of the respondents felt they would use an information system such as NTIS if it was made available.
2. Student and staff utilization of the NTIS system could be better realized if more portable microfiche readers were made available.
3. The most sought after type of information by the VTAE staff was in the area of recent innovations and ideas. This is the type of information provided by NTIS.
4. Because of the need for information and material on recent innovations and ideas, a system such as NTIS housed in the schools' resource center would help VTAE staff utilize this type of information.
5. There is a definite need for VTAE staff to have training in the area of using information systems such as ERIC and NTIS. Knowledge of the computerized information search capability in these systems would also be helpful.

Recommendations

The information obtained during the course of this study suggests there is a definite need for an information system such as NTIS to be used by the VTAE staff. The following recommendations are considerations that should be looked at before any further changes of action be made concerning information type search systems.

1. Further study should be done on the NTIS system and also the ERIC system. From pilot studies conducted by this researcher, it was found that NTIS provides a very sophisticated level of information on innovations and ideas while the ERIC system provides information that appears to be on a level that may be more easily understood by the VTAE staff and the students who would be utilizing this type of information search system. It may be necessary to have assistance in interpreting NTIS documents.
2. There is a need for the VTAE system to enhance the information systems available for staff to use in finding new and relevant information. The systems that best provide this type of information are computerized information search systems such as NTIS or ERIC. ERIC is presently used by many of the VTAE districts.
3. Microfiche readers that are portable would greatly facilitate use of a system such as NTIS.
4. Workshops pertaining to the procedures and uses in conducting computerized information type searches are needed for the majority of the VTAE staff. These workshops should also include content on acquisition of documents and their utilization in curriculum development and instruction.

Appendix A

GEOGRAPHICAL MAP IDENTIFYING THE
VTAE DISTRICTS SURVEYED

Wisconsin VTAE District Location and Population Distribution Plate

* Population distribution of Wisconsin based on 1970 census
* Location of four VTAE districts used within this study
* Source: Wisconsin Board of Vocational, Technical and Adult Education Planning

Appendix B

KEY ADMINISTRATIVE PERSONNEL
WHO DISTRIBUTED SURVEY INSTRUMENT

Mr. Gene Christiaansen
Campus Administrator
Wisconsin Indianhead Technical Institute
Rice Lake Campus
34 South Wilson Avenue
Rice Lake, WI 54868

Mr. Richard Parish
Campus Administrator
Wisconsin Indianhead Technical Institute
Superior Campus
805 Belknap Street
Superior, WI 54880

Mr. Warren Leonard
Campus Administrator
Wisconsin Indianhead Technical Institute
New Richmond Campus
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New Richmond, WI 54017

Mr. Don Marcouiller
Campus Administrator
Ashland Campus
2100 Beaser Avenue
Ashland, WI 54806

Mr. Domonic Bordini
Fox Valley Technical Institute
1825 North Bluemound Drive
Appleton, WI 54911

Mr. Richard T. Anderson
Waukesha County VTAE District
800 Main Street
Pewaukee, WI 53072

Mr. Daniel Wagner
Southwest Wisconsin VTAE
Bronson Boulevard
Fennimore, WI 53809

Appendix C

SURVEY INSTRUMENT COVER LETTER

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

May 3, 1976

Dear Colleague:

The Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout is presently conducting a study dealing with the feasibility of implementing a research retrieval system called National Technical Information Service (NTIS) into the VTAE system.

The National Technical Information Service (NTIS) is the central source for the public sale of Government-sponsored research and development reports, and other government analyses prepared by Federal agencies, their contractors or grantees. The NTIS collection now exceeds 730,000 titles, to which 60,000 new reports are added annually. These reports contain new information vital to fields like the environment, energy, electronics, the behavioral sciences, biological and medical sciences, and many more.

You can make a significant contribution to the success of the study by completing the enclosed questionnaire and returning it promptly to Leland W. Rust, Center for Vocational, Technical and Adult Education at UW-Stout. Your input is needed and will be appreciated. A business envelope is enclosed for your reply.

The completion of the questionnaire should take no more than fifteen minutes. Your cooperation is truly appreciated.

Sincerely,

Leland W. Rust

Leland W. Rust
Research Assistant
Center for Vocational,
Technical and Adult
Education

Harold H. Halfin

Harold H. Halfin
Co-Director
Center for Vocational,
Technical and Adult
Education

Appendix D

SURVEY INSTRUMENT

Center for Vocational, Technical
and Adult Education
University of Wisconsin-Stout

THE NEEDS ASSESSMENT OF IMPLEMENTING NTIS INTO THE VTAE SYSTEM

1. In what Vocational District are you presently employed?

(1)___Fox Valley
(2)___Madison Area
(3)___Mid State
(4)___Milwaukee Area
(5)___North Central Technical Institute
(6)___Southwest Wisconsin
(7)___VTAE District 1
(8)___Wisconsin Indianhead

2. In what one area do you do the greater part of your work? (Check one)

(1)___Administration
(2)___Agriculture
(3)___Business & Office Occupations
(4)___Distributive Education
(5)___General Education
(6)___Health Occupations
(7)___Home Economics
(8)___Research
(9)___Trade and Industry
(10)___Other:_____

3. What is your present position?

(1)___Assistant Director
(2)___Coordinator
(3)___Department Chairperson
(4)___Teacher
(5)___Other:_____

4. Please check the type of information sources that you use for your work.

(1)___Books
(2)___Government Publications
(3)___Manufacturer's Data Sheets
(4)___Newspapers
(5)___Periodicals
(6)___Research Materials
(7)___Trade Journals
(8)___Workbook Publications
(9)___Other:_____

5. Please check in column A the following information retrieval activities that you have used in the past and circle your present competency level of each retrieval activity in column B.

A. RETRIEVAL ACTIVITIES (Check the activities below that you have used.)	B. COMPETENCY LEVEL (Circle one) 5. Can Do With Skill; 4. Can Do With Guide or Manual; 3. Can Do With Assistance; 2. Aware Of; 1. Not Aware Of
(1)___Reader's Guide to Periodical Literature	1 2 3 4 5
(2)___ERIC Computer Search	1 2 3 4 5
(3)___ERIC Manual Search	1 2 3 4 5
(4)___NTIS Computer Search	1 2 3 4 5
(5)___NTIS Manual Search	1 2 3 4 5
(6)___Other:_____	1 2 3 4 5

Please turn to other side.....

6. How often do you look for the following types of information when preparing material for your work? (Circle one number in each of the following areas.)

Information On:	5. Very Often	4. Frequently	3. Periodically	2. Seldom	1. Never
(1) Alternative sources of materials and information for my work	5	4	3	2	1
(2) Basic processes, competencies and performance tasks in my field	5	4	3	2	1
(3) Curriculum materials and demonstration projects	5	4	3	2	1
(4) Evaluation and assessment of students and programs	5	4	3	2	1
(5) Labor market information	5	4	3	2	1
(6) Recent innovations and ideas in my field	5	4	3	2	1
(7) Theoretical background material in my field	5	4	3	2	1
(8) Other: (Please List) _____	5	4	3	2	1

On the right side of each item below CIRCLE the one number that most closely approximates the extent to which you agree or disagree.

If you STRONGLY AGREE (SA) Circle: 5
If you AGREE (A) Circle: 4
If you are UNDECIDED (U) Circle: 3
If you DISAGREE (D) Circle: 2
If you STRONGLY DISAGREE (SD) Circle: 1

	SD	D	U	A	SA
7. Most of the time I am able to find new and relevant information and material pertaining to my area in my school's resource center when I need it.	1	2	3	4	5
8. I would like to have access to the reports of government sponsored research projects.	1	2	3	4	5
9. After identifying a problem or topic, I am able to readily establish key words or descriptors which best describe the problem or topic.	1	2	3	4	5
10. My area of work seldom requires me to obtain research material.	1	2	3	4	5

Please turn to next page.....

If you STRONGLY AGREE (SA) Circle: 5
If you AGREE (A) Circle: 4
If you are UNDECIDED (U) Circle: 3
If you DISAGREE (D) Circle: 2
If you STRONGLY DISAGREE (SD) Circle: 1

		SD	D	U	A	SA
11.	Most of the information I use in my work comes from textbooks.	1	2	3	4	5
12.	After identifying a problem or topic, I understand how to conduct an information search* on that topic.	1	2	3	4	5
13.	I am interested in finding new information in my field to be used in classroom instruction or for my job responsibilities.	1	2	3	4	5
14.	I feel there is a need for an information search* system in our resource center.	1	2	3	4	5
15.	I feel that relevant and new information in my area would assist me in classroom instruction or for my job responsibilities.	1	2	3	4	5
16.	If an information search* system was introduced in the resource center, I would want to use the system for a source in developing classroom instruction or for assisting me in my job responsibilities.	1	2	3	4	5
17.	There seems to be little need for additional content matter in my area other than what is found in textbooks.	1	2	3	4	5
18.	I find technical information in my area is constantly changing and as a result makes new and relevant information hard to find.	1	2	3	4	5
19.	The NTIS system could provide assistance to students in developing projects, papers, etc..	1	2	3	4	5
20.	There are adequate microfiche readers and reproduction facilities in our resource center.	1	2	3	4	5
21.	If microfiche materials were available, I would probably use them more if portable microfiche readers were available for my use.	1	2	3	4	5

* INFORMATION SEARCH: A means of providing new sources of information through the use of such systems as NTIS (National Technical Information Service) and ERIC (Educational Resources Information Center.)

Thank you. *Please return to:*

Leland W. Rust
Research Assistant
225F Applied Arts Bldg.
UW-Stout
Menomonie, WI 54751